

Documentation for display_rc (display rating curve) 11/4/02

1.0 General Information

1.1 Application Description

The purpose of the `display_rc` program is to give a tabular and graphic display of rating curves from the database. It also allows the user to input a stage (or flow) and have the program return the flow (or stage). It uses functions from the `rat` program (see separate documentation) to pull the rating curves and shifts from the database and to interpolate between given points. It handles both river (gage height-discharge) and reservoir (elevation-storage) rating tables. This program is written in `esql/C` and `Motif`.

1.2 Design Considerations

This program handles multiple rating curve/shift definitions. It will automatically bring up the latest version, but allows the user to page through previous ones.

1.3 Application Assumptions

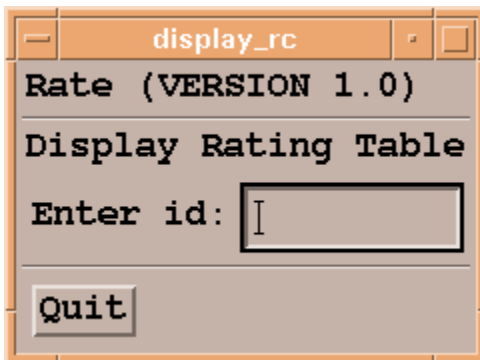
2.0 Configuration Information

The following `apps_defaults` tokens are used:

`adb_name` archive database name

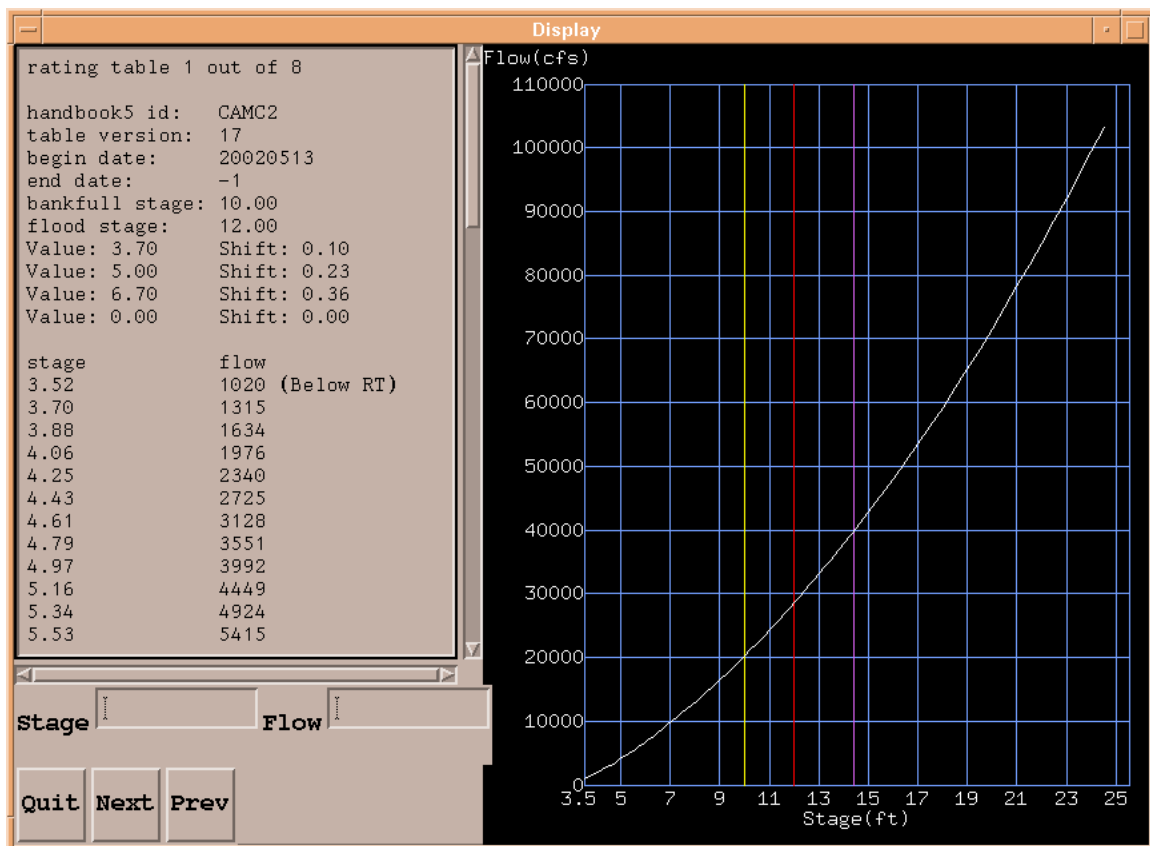
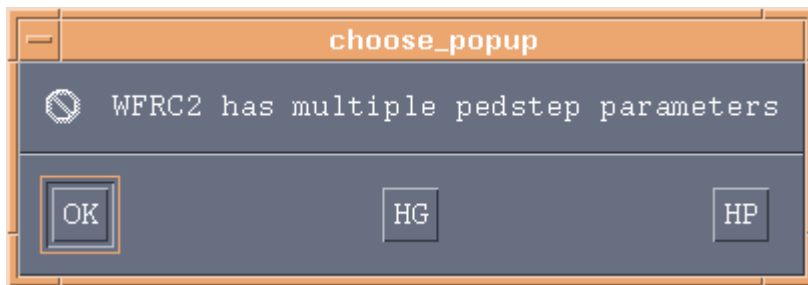
3.0 User How-To

This program can be run either through the *arcmenu* main menu, or on the command line by simply typing *display_rc*. A small window will pop up asking for user input.



Type in the id of the rating curve you wish to view and hit the carriage return. Another window will appear with a graphic and tabular display of the most recent

rating table for that site along with bankfull and flood stages if defined. If the id has both HP (reservoir elevation) and HG (river stage) curves defined for it, a window will pop up to allow you to choose which you wish to view.



The yellow vertical line on the graph is the bankfull stage and the red line is the flood stage. The purple line is the top of the defined rating curve, all values above this have been interpolated. The user may view previous rating curve/shift definitions by using the “Prev” button. The user may also enter either a stage or a flow value in the area provided and hit carriage return to have the program return either the flow or stage computed using the displayed rating.

4.0 Troubleshooting Information

If a site is not displaying, check to make sure it has entries in both the rating and ratingsshift tables of the archive database that correspond (i.e. have the same

table versions). Bankfull and flood stages are stored in the rivercrit database table.

5.0 Installation Instructions

6.0 Maintenance Information

Originating Programmer/Office: Colorado Basin River Forecast Center
Salt Lake City, UT

Maintenance Programmer/Office: Alcorn, Brenda
Colorado Basin River Forecast Center
Salt Lake City, UT

7.0 References

Rat program documentation.